PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. P02083US1A; 295620-214164

Group Art Unit:	1713	
Examiner:	Harlan	
Inventor:	Wang, et al.	**PRE-APPEAL BRIEF CONFERENCE REQUEST**
Serial No.:	10/791,177	
Filed:	March 2, 2004	
For:	Rubber Composition Containing Functionalized Polymer Nanoparticles	

Sir:

The Examiner has finally rejected claims 1-5, 8, 9, 24-27, and 29-42 as being unpatentable under 35 U.S.C. §102(e). The rejections of these claims are now appealed. Applicants hereby request review of the Final Rejection prior to filing an Appeal Brief for the reasons set forth below. Any fees due should be charged to Deposit Account No. 060925, ref: P02083US1A.

I. The Final Office Action Fails to Make a Prima Facie Case of Anticipation and is Clearly Erroneous in Law and Fact

In the Final Office Action, all the pending claims, 1-5, 8, 9, 24-27, and 29-42, were rejected under 35 U.S.C. § 102(e) over U.S. Pat. No. 7,238,751 to Wang. Wang is the same reference that was used to reject all the claims in the preceding Non-Final Office Action. The Office Action fails to make a *prima facie* case of anticipation because it does not point to an anticipating disclosure for each element of the pending claims, and the cited reference clearly does not anticipate the claims. Furthermore, it is clearly erroneous in fact and law.

The Wang reference and the current application are commonly owned, and thus Wang is only available as a reference for anticipation because it cannot be considered for obviousness purposes due to 35 U.S.C. § 103(c). Wang does not anticipate the current claims.

A The Final Office Action Fails to Make a Prima Face Case of Anticipation

In response to the Non-Final Office Action, Applicants amended and argued against the § 102(e) rejection over Wang. In the Final Office Action, the Examiner merely stated that Applicants' arguments were not persuasive and provided no explanation or reasoning in reply to Applicants' arguments.

The Final Office Action fails to point to an anticipating disclosure of the following limitations of independent claims 1 and 31: "provided that the functional group is not the product of an anionic initiator" (claim 1); and "wherein functional groups are located throughout the outer layer of the nanoparticle"[1] (claim 31). Furthermore, the elements of dependent claims 29,

[1] This limitation embodies the structural difference between functionalization by functional initiators (which imparts only one functional group at the end of one or more nanoparticle polymer "brush" chains) and functionalization by the process taught by

32-34, 36, and 37 were not addressed by the Final Office Action at all.

It is true that the Wang reference discloses a tin functionalized initiator at column 8: lines 39-40 for making polymers that are formed into nanoparticles. A tin-functionalized nanoparticle is also referred to at column 12, lines 39-40, but this can only be presumed to be formed by the earlier mentioned tin-functionalized initiators, since no other information is given to the contrary. The cited passage of Wang is clearly not an anticipating disclosure of the element "provided that the functional group is not the product of an anionic initiator." The tin-functionalized nanoparticles disclosed in Wang are functionalized with a tin initiator, which is specifically excluded by independent claim 1.

The tin-functionalized nanoparticles of the Wang reference also are not a disclosure of the limitation "wherein functional groups are located throughout the outer layer of the nanoparticle." The disclosure says nothing about where the tin functional groups are on the nanoparticle, but they can only be presumed to be at the end of one or more nanoparticle polymer chains, since a tin-functionalized initiator would only place such functional groups in this location.

Furthermore, as mentioned by the Examiner, the Wang application discloses inorganic fillers such as aluminum hydrate at column 12, line 2. However, this passage of Wang is clearly not an anticipating disclosure of the elements "provided that the functional group is not the product of an anionic initiator" or "wherein functional groups are located throughout the outer layer of the nanoparticle." The disclosure of an aluminum hydrate filler has nothing to do with a functionalized nanoparticle. There is no disclosure that such a filler would "functionalize" the

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the current specification (functionalization at several locations throughout the polymer "brush" chains in the outer layer).

nanoparticle at all, let alone "functionalize the nanoparticle throughout the outer layer." If the Examiner is relying on inherency to disclose the unaddressed elements of the claims, this was not stated, and is incorrect. The recited claim elements are clearly not "necessarily present" in Wang, as is required for an inherent disclosure.

The Final Office Action does not even attempt to address the limitations of claims 29, 32-34, 36, and 37. The following limitations of these claims are not disclosed by Wang: "wherein said functional group is selected from the group consisting of maleic anhydride, azo, epoxide, and mixtures thereof;" and "wherein said functional group is complexed with a metal." These distinctions were specifically argued in the previous response and the Final Office Action made no attempt to respond to these arguments or cite new subject matter addressing them.

Accordingly, a prima facie case of unpatentability has not been made against the claims of the current application.

B. The Final Office Action is Cleary Erroneous in Law and Fact

An objection was made to claim 1, stating that Applicants have not provided a page and line number supporting the amended language. This part of the Office Action is clearly erroneous in law and fact for at least two reasons: (1) such an issue is not the proper subject matter for an objection to a claim; and (2) Applicants did, in fact, provide a citation to the page number (though admittedly not a line number) where the amended language was supported. Furthermore, the amendment is supported by the specification and in accordance with the law, as explained below.

The limitation "the functional group is not the product of an anionic initiator" is supported by the disclosure of functionalization without the use of initiators at page 11, lines 9-15, page 12, lines 1-4, and page 17, lines 14-19. Furthermore, functional initiators are disclosed

at page 15 of the specification. Negative limitations such as "the functional group is not the product of an anionic initiator" are allowable under MPEP § 2173.05(i): "If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. *See In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ('[the] specification, having described the whole, necessarily described the part remaining.')" MPEP 2173.05(i). Along these lines, the specification discloses both functionalized anionic initiators and functionalization without using anionic functional initiators. Thus, the limitation is sufficiently supported.

II. Conclusion

For the foregoing reasons, Applicants assert that the Final Office Action should be overturned, and that this application is in condition for allowance. The Examiner has had several opportunities to do a search and cite the closest prior art, and a prima facie case of unpatentability has not been made. Accordingly, it is requested that this case be allowed.

Respectfully submitted,

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2/3/09

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